

WHAT IS CLAIMED IS:

1. A method of manufacturing a structural frame for dissipating heat from an electronic device, comprising:

providing a base polymer matrix;  
mixing a thermally conductive filler material into said base polymer matrix to form molding material;  
net-shape injection molding said molding material into a structural frame;  
providing an electronic circuit board, said electronic circuit board having a heat generating electronic component disposed thereon; and  
mounting said electronic circuit board to said structural frame with said electronic component being in thermal communication with said structural frame;  
dissipating heat from said heat generating electronic component through said structural frame.

2. The method of manufacturing a structural frame of Claim 1, wherein said base polymer matrix is liquid crystal polymer.

3. The method of manufacturing a structural frame of Claim 1, wherein said thermally conductive filler material is selected from the group consisting of carbon fiber, metallic flakes, boron nitride and mixtures thereof.